## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

## LISTING OF CLAIMS:

1. (currently amended): A secondary battery having comprising at least a positive electrode, a negative electrode, and an electrolyte, wherein the secondary battery includes a polymer having a repeating unit represented by formula (1) as an active material of at least one of the positive electrode and the negative electrode comprises a polymer having a repeating unit represented by formula (1) as an active material:

According to formula (1), wherein R1, R2, R3 and R4 each independently represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted aromatic hydrocarbons, a substituted or unsubstituted hetroaromatic groups, a halogen atom, or an alkylene group that may be coupled to the ring form at least one or both of R1 and R3, and R2

and R4, to form a ring.

- 2. (currently amended): The secondary battery according to claim 1 eontains containing the polymer as a positive electrode active material.
- 3. (original): The secondary battery according to claim 1, wherein the secondary battery is a lithium secondary battery.
- 4. (currently amended): A secondary battery having comprising at least a positive electrode, a negative electrode, and an electrolyte, wherein the secondary battery includes s a polymer represented by formula (2) as an active material of at least one of the positive electrode and the negative electrode comprises a polymer represented by formula (2) as an active material:

$$\begin{array}{c|c}
\mathbf{R^1} & \mathbf{R^3} \\
 & \downarrow \\
\mathbf{C} - \mathbf{C} - \mathbf{N} \longrightarrow \mathbf{n} \\
\mathbf{R^2} & \mathbf{R^4} & \mathbf{O}
\end{array}$$
(2)

According to formula (1), wherein R1, R2, R3 and R4 each independently represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted aromatic hydrocarbons, a substituted or unsubstituted hetroaromatic groups, a halogen atom, or an alkylene group that may be coupled to the ring form at least one or both of R1 and R3, and R2 and R4, to form a ring, and

wherein n represents a positive integer.

- 5. (original): The secondary battery according to claim 4 containing the polymer as a positive electrode active material.
- 6. (original): The secondary battery according to claim 4, wherein the secondary battery is a lithium secondary battery.
- 7. (currently amended): A secondary battery containing comprising at least a positive electrode and a negative electrode, wherein a polymer having a repeating unit represented by formula (1) isas a reactant or product of at least one of an electrode reaction of at least a positive electrode and a negative electrode, wherein the polymer has a repeating unit represented by formula (1)-:

$$\begin{array}{c|cccc}
R^{1} & R^{3} \\
 & & | & | \\
 & & | & | \\
 & C - C - N - | & | \\
 & & | & | & | \\
 & R^{2} & R^{4} & O \\
\end{array} (1)$$

According to formula (1), and wherein R1, R2, R3 and R4 each independently represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted aromatic hydrocarbons, a substituted or unsubstituted hetroaromatic groups, a halogen atom, or an alkylene group that may be coupled to the ring form at least one of or both of R1 and R3, and R2 and R4, to form a ring.

- **8.** (original): The secondary battery according to claim 7 containing the polymer as a reactant or product of the positive electrode reaction.
- **9.** (original): The secondary battery according to claim 7, wherein the secondary battery is a lithium secondary battery.

10. (currently amended): A secondary battery of comprises at least a positive electrode and a negative electrode, wherein at least one of electrode reaction of a positive electrode and negative electrode containing contains a chemical compound obtained by forming a polymer having a repeating unit represented by formula (1)-:

According to formula (1), wherein R1, R2, R3 and R4 each independently represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted aromatic hydrocarbons, a substituted or unsubstituted hetroaromatic groups, a halogen atom, or an alkylene group that may be coupled to the ring form at least one or both of R1 and R3, and R2 and R4, to form a ring.

11. (original): The secondary battery according to claim 10, wherein the chemical compound is contained in the positive electrode.

12. (original): The secondary battery according to claim 10, wherein the secondary battery is a lithium secondary battery.